**St. Joseph’s College (Autonomous), Bangalore**

**Register No:**

**Date:**

**IV Semester Examination, April 2017**

**B C A**

**CA 4315 : Java Programming**

**Time 3Hrs Max Marks 70**

 **This paper contains 2 printed pages and 3 parts**

**PART-A**

**Answer all TEN questions 2 x10 = 20**

1. **What is byte code?**
2. **What is meant by automatic type conversion?**
3. **Define constructor.**
4. What are wrapper classes in java?
5. What is the use of finalize() method?
6. What are the different access modifiers in java?
7. What is an abstract class? Explain with an example.
8. What do you mean by threads in java?
9. What is an exception? How do you handle it?
10. What are ByteStream classes?

**PART-B**

**Answer any FIVE questions 6 x5 = 30**

11. **a. How java is platform independent language?.Justify.**

**b. Write a program to find the factorial of a given number.**

1. **Explain IOStream class with syntax.**
2. **What is method overloading? Write a program to illustrate method overloading.**
3. State and explain interfaces in detail
4. Explain the use of static keyword in java.
5. What is hierarchical inheritance? Explain with a program example.
6. Write a program containing possible exception .Use a try block and throw it and use a catch block to handle it properly.

**PART-C**

**Answer any TWO questions 10 x2 = 20**

1. **What is an applet? Explain applet life cycle and its working with a program example.**
2. Describe the decision making and branching statements with program examples.
3. Write a program to create two threads .One thread will print even numbers and other one will print odd numbers between 1 and 20.